FIG. 1

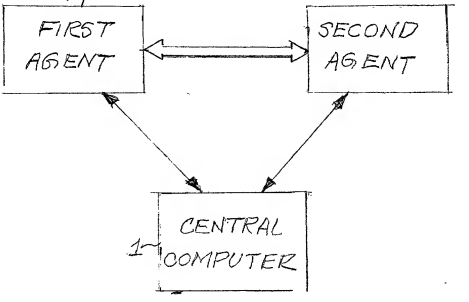

2(1)
2(2)
FIRST AGENT
SECOND AGENT
CENTRAL COMPUTER
1

FIG. 2

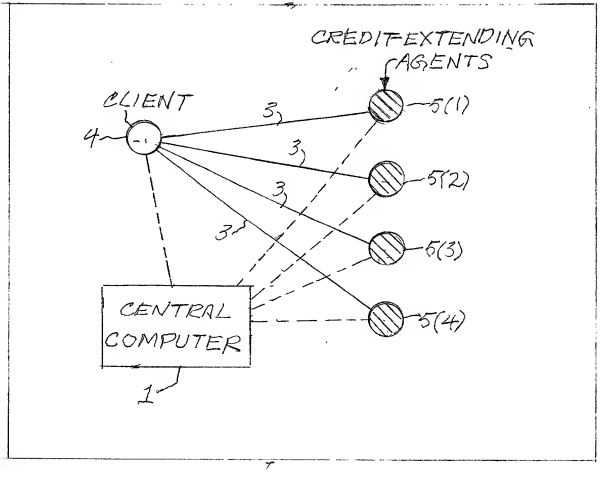

CREDIT-EXTENDING AGENTS
CLIENT
4
3
5(1)
5(2)
5(3)
5(4)
CENTRAL COMPUTER
1

FIG. 4

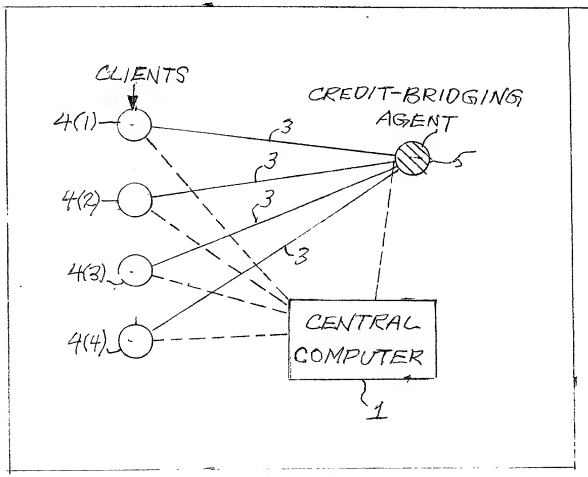

CLIENTS
CREDIT-BRIDGING AGENT
4(1)
4(2)
4(3)
4(4)
3
3
3
3
5
CENTRAL COMPUTER
1

FIG. 5

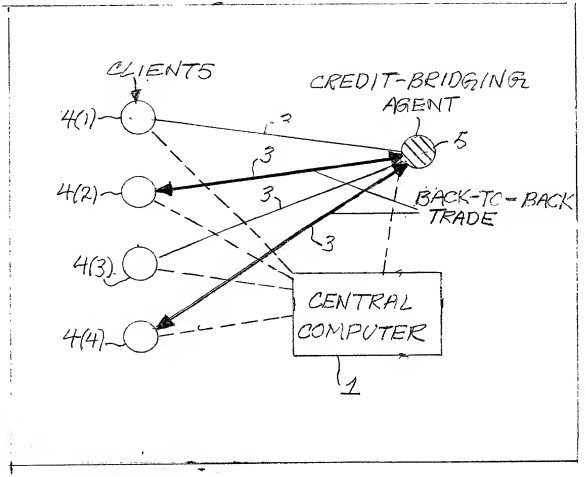

CLIENTS
CREDIT-BRIDGING AGENT
4(1)
4(2)
4(3)
4(4)
3
3
3
5
BACK-TO-BACK TRADE
CENTRAL COMPUTER
1

FIG. 6

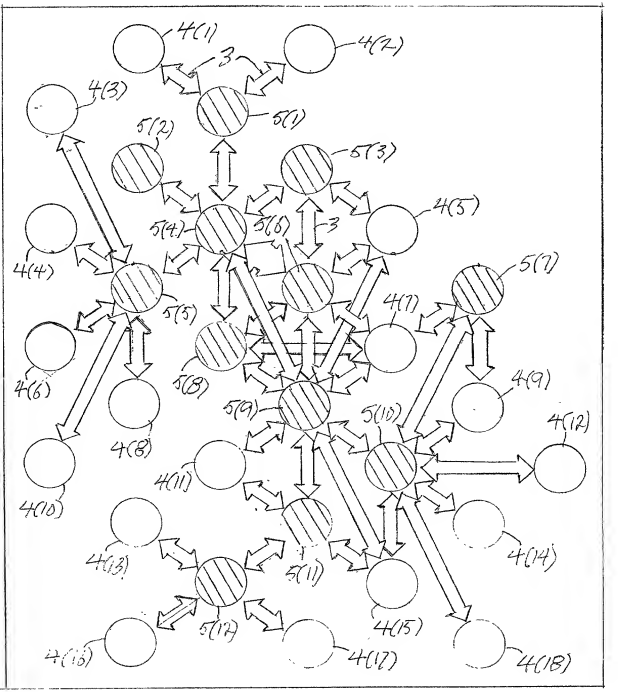

4(1)
4(2)
3
4(3)
5(1)
5(2)
5(3)
4(4)
5(4)
5(6)
3
4(5)
5(7)
5(5)
4(7)
4(6)
5(8)
4(9)
5(9)
5(10)
4(12)
4(8)
4(11)
4(10)
4(13)
5(11)
4(14)
5(12)
4(15)
4(16)
4(17)
4(18)

FIG. 7

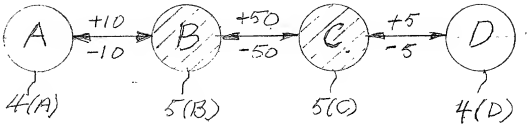

A
B
C
D
+10
-10
+50
-50
+5
-5
4(A)
5(B)
5(C)
4(D)

FIG 8

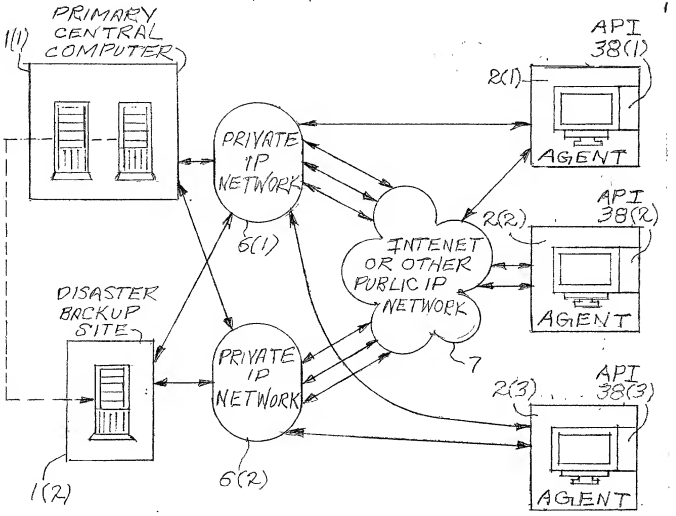

PRIMARY CENTRAL COMPUTER
1(1)
PRIVATE IP NETWORK
6(1)
INTENET OR OTHER PUBLIC IP NETWORK
7
DISASTER BACKUP SITE
1(2)
PRIVATE IP NETWORK
6(2)
API 38(1)
2(1)
AGENT
API 38(2)
2(2)
AGENT
API 38(3)
2(3)
AGENT

FIG. 9

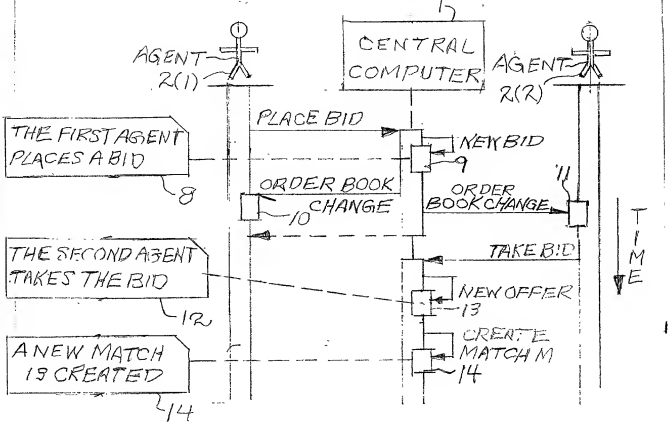
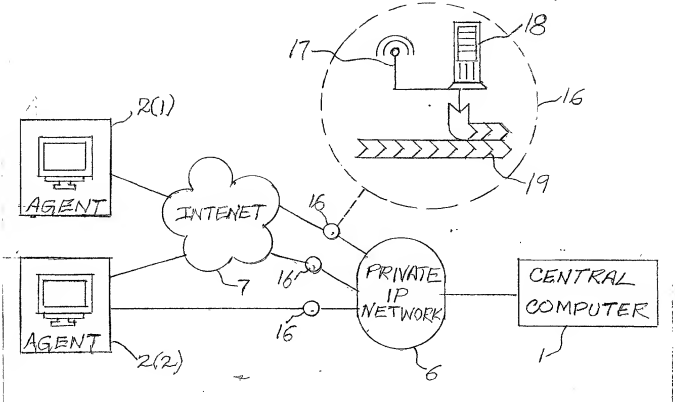


FIG. 10



TOZOTA 00550001

FIG. 11

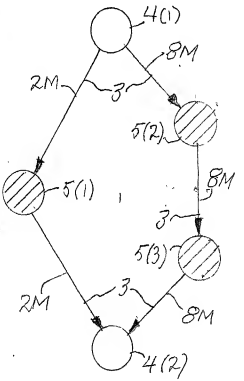
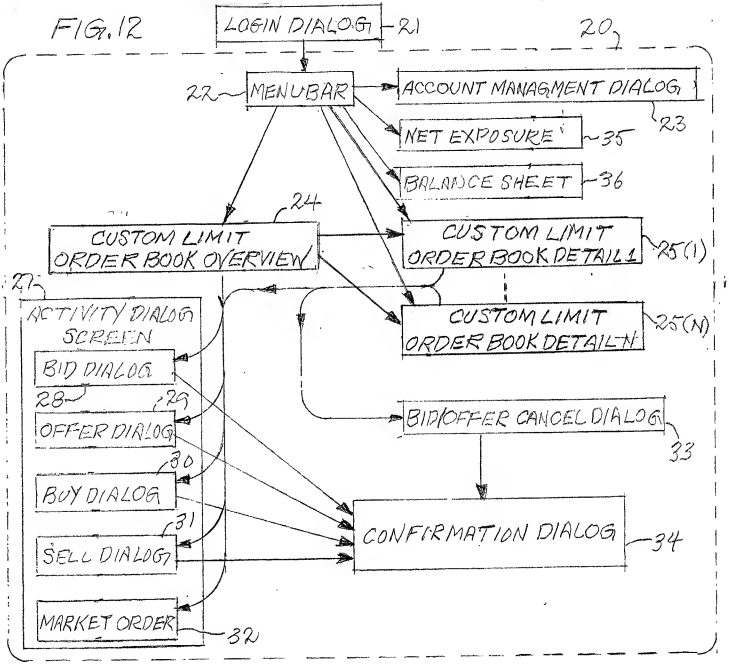


FIG. 12



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Title: Global Electronic Trading System
Inventors: Armand Giodjo, et al.
Atty. Docket No.: 22593-06028
Sheet 6 of 31

Express Mail Label No. EL566298053US
Title: Global Electronic Trading System
Inventors: Armand Giodijo, et al.
Atty. Docket No.: 22593-06028
Sheet 7 of 31

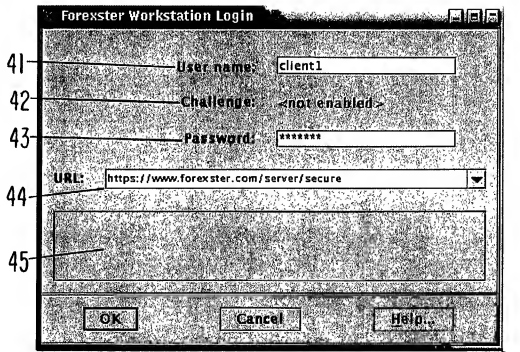
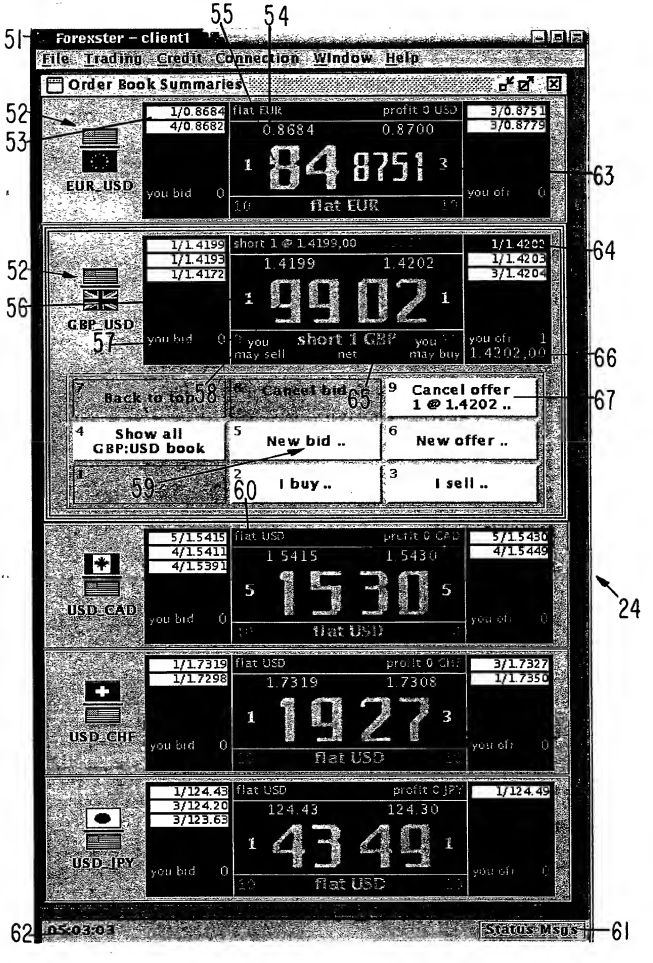


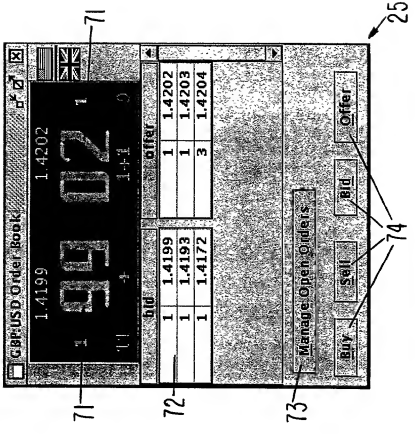
FIG.13

FIG.14


55
54
51
Forexster – client1
File Trading Credit Connection Window Help
Order Book Summaries
52
53
1/0.8684
4/0.8682
flat EUR
profit 0 USD
0.8684
0.8700
3/0.8751
3/0.8779
EUR_USD
you bid 0
84 8751
flat EUR
you off 0
63
64
1/1.4199
1/1.4193
1/1.4172
short 1 @ 1.4199,00
1.4199
1.4202
1/1.4202
1/1.4203
3/1.4204
52
56
GBP_USD
57
you bid 0
99 02
you may sell
short 1 GBP net
you may buy
you off 1
1.4202,00
66
7 Back to top
58
8 Cancel bid
65
9 Cancel offer 1 @ 1.4202 ..
67
4 Show all GBP:USD book
5 New bid ..
6 New offer ..
1
59
2 I buy ..
60
3 I sell ..
5/1.5415
4/1.5411
4/1.5391
flat USD
profit 0 CAD
1.5415
1.5430
5/1.5430
4/1.5449
USD_CAD
you bid 0
5 15 30 5
flat USD
you off 0
24
1/1.7319
1/1.7298
flat USD
profit 0 CHF
1.7319
1.7308
3/1.7327
3/1.7350
USD_CHF
you bid 0
1 19 27 3
flat USD
you off 0
1/124.43
3/124.20
3/123.68
flat USD
profit 0 JPY
124.43
124.30
1/124.49
USD_JPY
you bid 0
43 49
flat USD
you off 0
62
05:03:03
Status Msgs
61

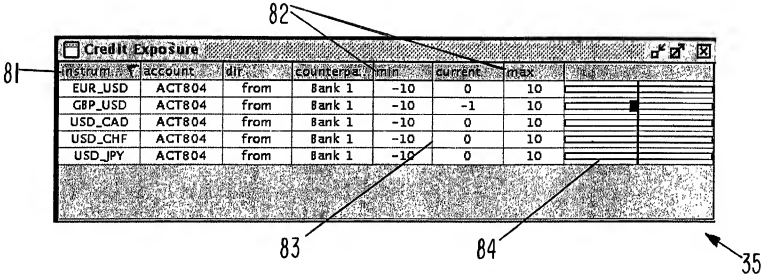
FOOTY "COPYRIGHT

FIG. 15



10095609 .110704

FIG.16



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Inventors: Armand Giodjo, et al.
Atty. Docket No.: 2593-06028
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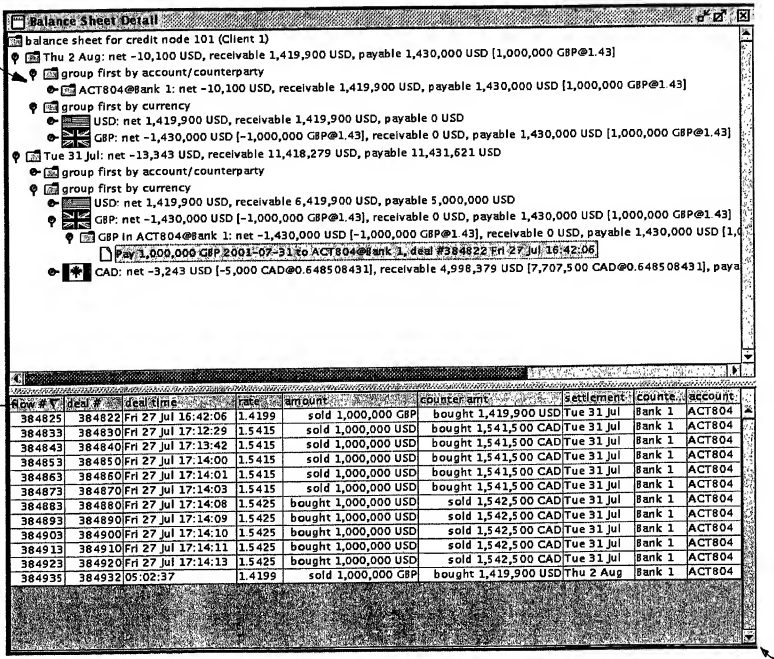
Express Mail Label No. EL566298053US
Title: Global Electronic Trading System
Inventors: Armand Glodjo, et al.
Atty. Docket No.: 22593-06028
Sheet 11 of 31



row #	deal #	deal time	rate	amount	counter amt	settlement	counte..	account
384825	384822	Fri 27 Jul 16:42:06	1.4199	sold 1,000,000 GBP	bought 1,419,900 USD	Tue 31 Jul	Bank 1	ACT804
384833	384830	Fri 27 Jul 17:12:29	1.5415	sold 1,000,000 USD	bought 1,541,500 CAD	Tue 31 Jul	Bank 1	ACT804
384843	384840	Fri 27 Jul 17:13:42	1.5415	sold 1,000,000 USD	bought 1,541,500 CAD	Tue 31 Jul	Bank 1	ACT804
384853	384850	Fri 27 Jul 17:14:00	1.5415	sold 1,000,000 USD	bought 1,541,500 CAD	Tue 31 Jul	Bank 1	ACT804
384863	384860	Fri 27 Jul 17:14:01	1.5415	sold 1,000,000 USD	bought 1,541,500 CAD	Tue 31 Jul	Bank 1	ACT804
384873	384870	Fri 27 Jul 17:14:03	1.5415	sold 1,000,000 USD	bought 1,541,500 CAD	Tue 31 Jul	Bank 1	ACT804
384883	384880	Fri 27 Jul 17:14:08	1.5425	bought 1,000,000 USD	sold 1,542,500 CAD	Tue 31 Jul	Bank 1	ACT804
384893	384890	Fri 27 Jul 17:14:09	1.5425	bought 1,000,000 USD	sold 1,542,500 CAD	Tue 31 Jul	Bank 1	ACT804
384903	384900	Fri 27 Jul 17:14:10	1.5425	bought 1,000,000 USD	sold 1,542,500 CAD	Tue 31 Jul	Bank 1	ACT804
384913	384910	Fri 27 Jul 17:14:11	1.5425	bought 1,000,000 USD	sold 1,542,500 CAD	Tue 31 Jul	Bank 1	ACT804
384923	384920	Fri 27 Jul 17:14:13	1.5425	bought 1,000,000 USD	sold 1,542,500 CAD	Tue 31 Jul	Bank 1	ACT804
384935	384932	05:02:37	1.4199	sold 1,000,000 GBP	bought 1,419,900 USD	Thu 2 Aug	Bank 1	ACT804

FIG.17

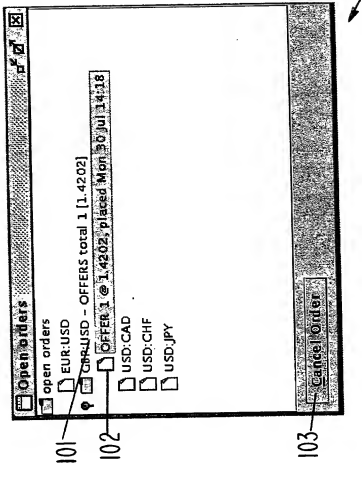

Open orders
open orders
EUR:USD
GBP:USD - OFFERS total 1 [1.4202]
OFFER 1 @ 1.4202, placed Mon, 30 Jul 14:18
USD:CAD
USD:CHF
USD:JPY
Cancel Order
101
102
103
33

FIG. 18

FRONT-END SCREEN

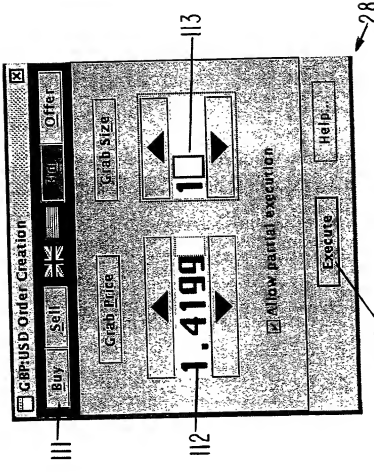


FIG.19

Express Mail Label No. EL566298053US
Title: Global Electronic Trading System
Inventors: Armand Glodjo, et al.
Atty. Docket No.: 22593-06028
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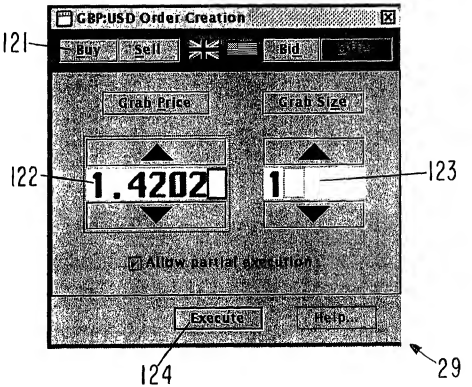

FIG.20

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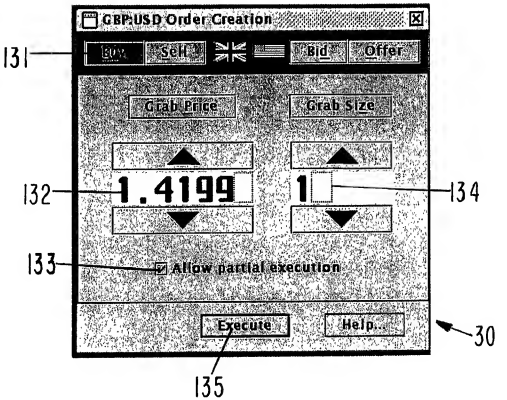


FIG. 21

Express Mail Label No.: EL566298053US
Title: Global Electronic Trading System
Inventors: Armand Giodlo, et al.
Atty. Docket No.: 22593-06028
Sheet 15 of 31

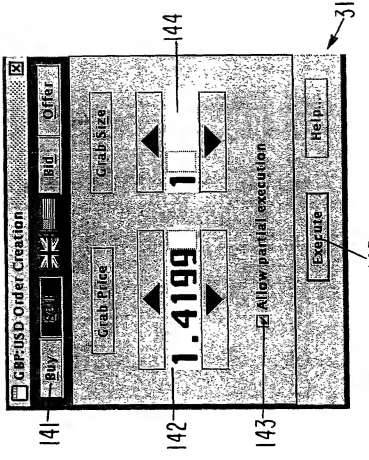
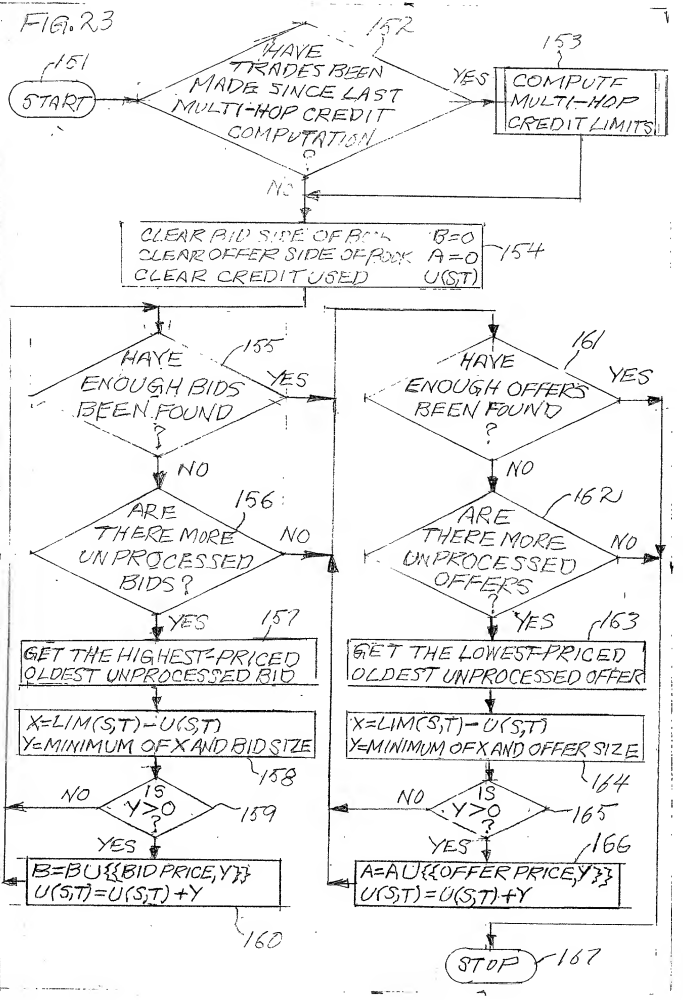

GBP/USD Order Creation
Buy
Sell
Bid
Offer
Grab Price
1.4199
Grab Size
1
Allow partial execution
Execute
Help...
141
142
143
144
145
31

FIG.22

FIG. 23



10074-0005C0001

FIG. 24

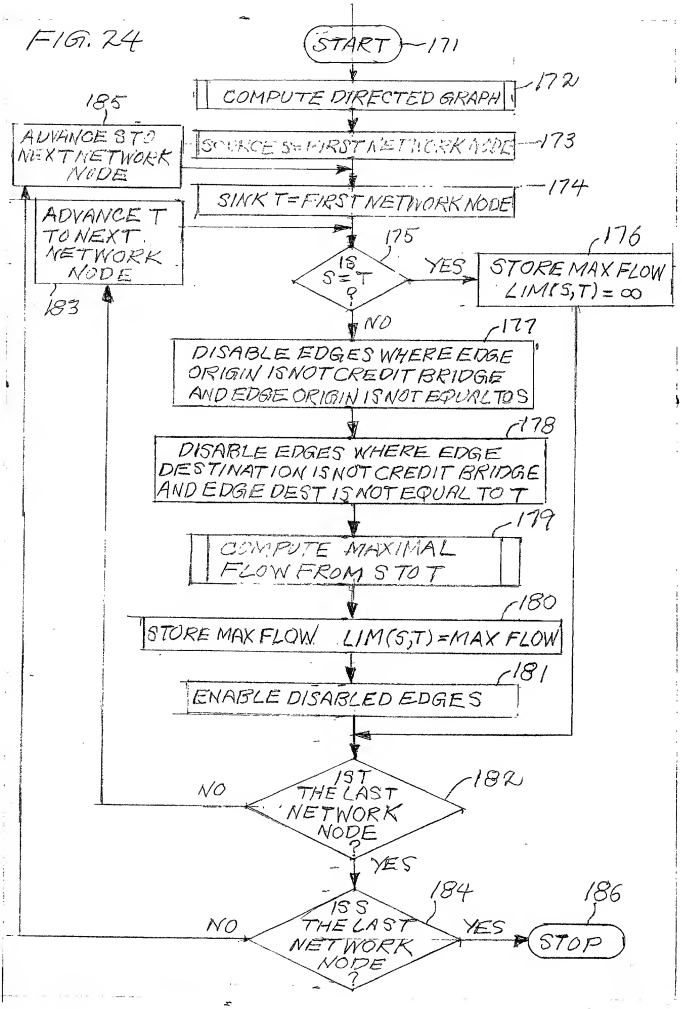
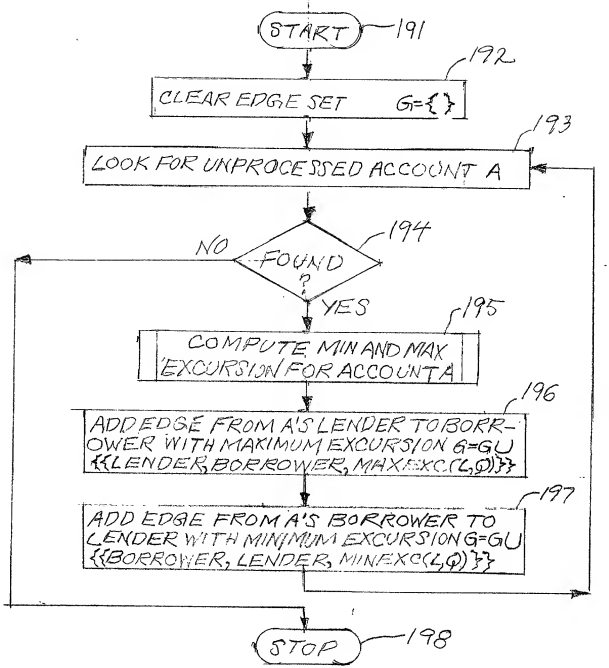

START
171
COMPUTE DIRECTED GRAPH
172
SOURCE S = FIRST NETWORK NODE
173
SINK T = FIRST NETWORK NODE
174
IS S = T ?
175
YES
STORE MAX FLOW LIM(S,T) = ∞
176
NO
DISABLE EDGES WHERE EDGE ORIGIN IS NOT CREDIT BRIDGE AND EDGE ORIGIN IS NOT EQUAL TO S
177
DISABLE EDGES WHERE EDGE DESTINATION IS NOT CREDIT BRIDGE AND EDGE DEST IS NOT EQUAL TO T
178
COMPUTE MAXIMAL FLOW FROM S TO T
179
STORE MAX FLOW LIM(S,T) = MAX FLOW
180
ENABLE DISABLED EDGES
181
IS T THE LAST NETWORK NODE ?
182
NO
YES
ADVANCE T TO NEXT NETWORK NODE
183
IS S THE LAST NETWORK NODE ?
184
NO
YES
STOP
186
ADVANCE S TO NEXT NETWORK NODE
185

FIG. 25



TOKYO-3053001

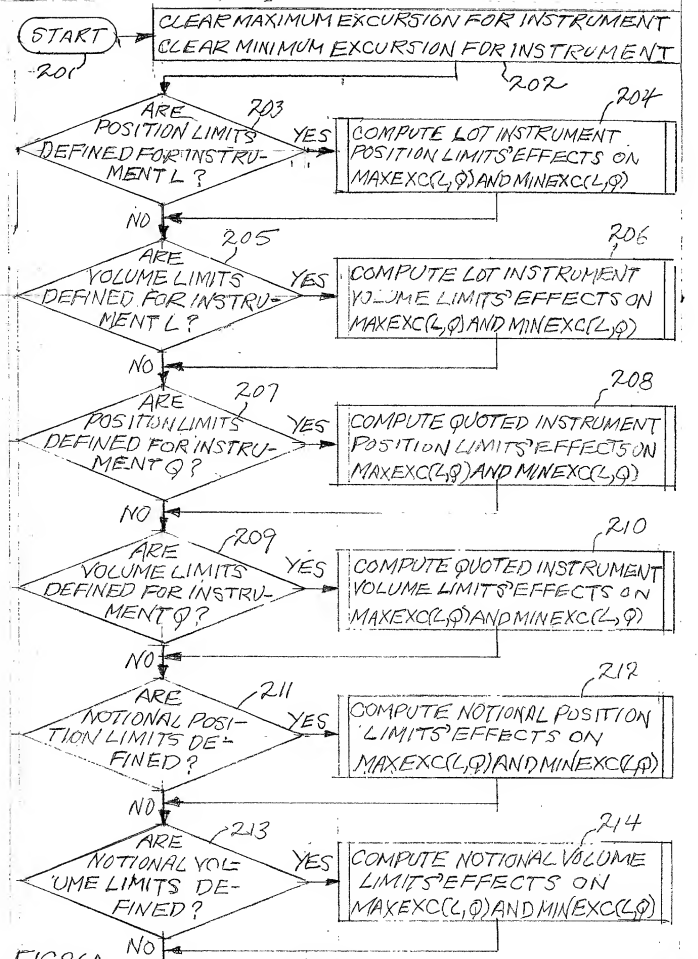


FIG. 26A

T0707.0055001

PAIR	MAXEXC(L,Q)=0	202
PAIR	MINEXC(L,Q)=-0	

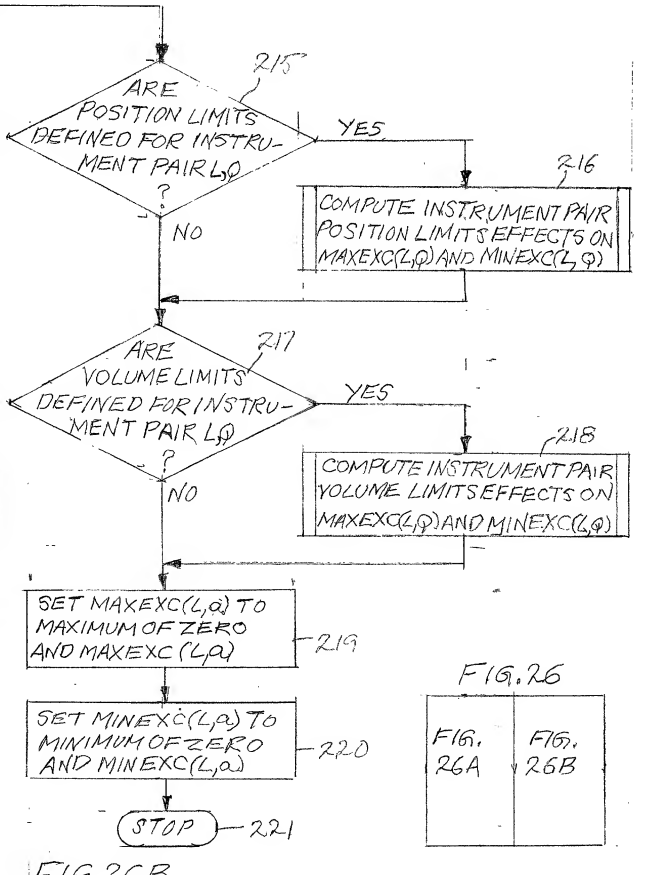


FIG. 26B

FIG. 26

FIG. 26A	FIG. 26B

TOP1.000000

FIG. 27

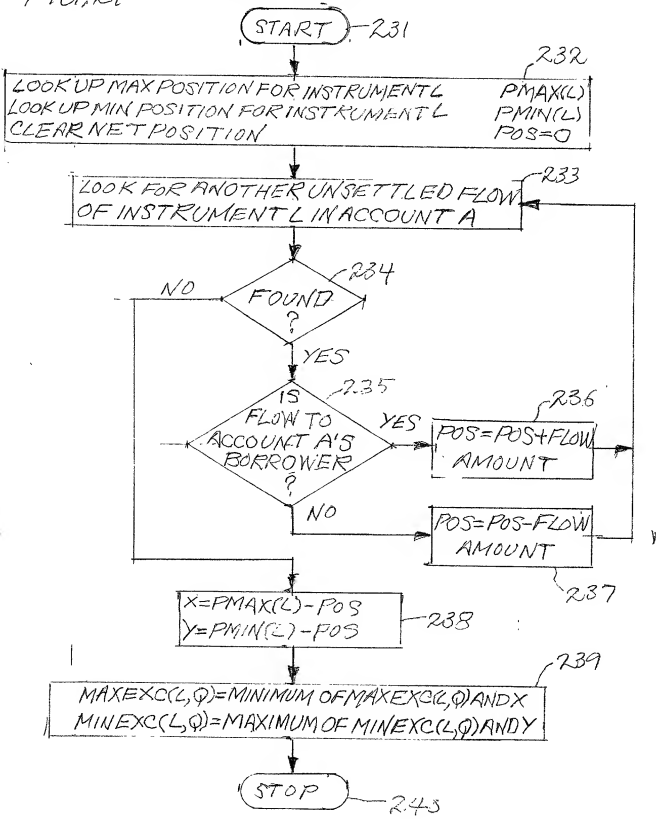
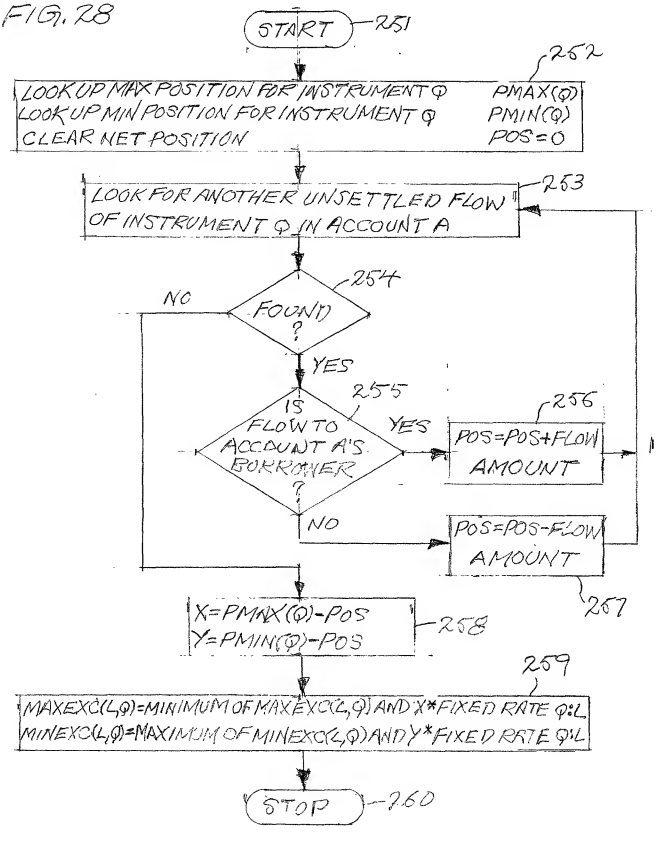
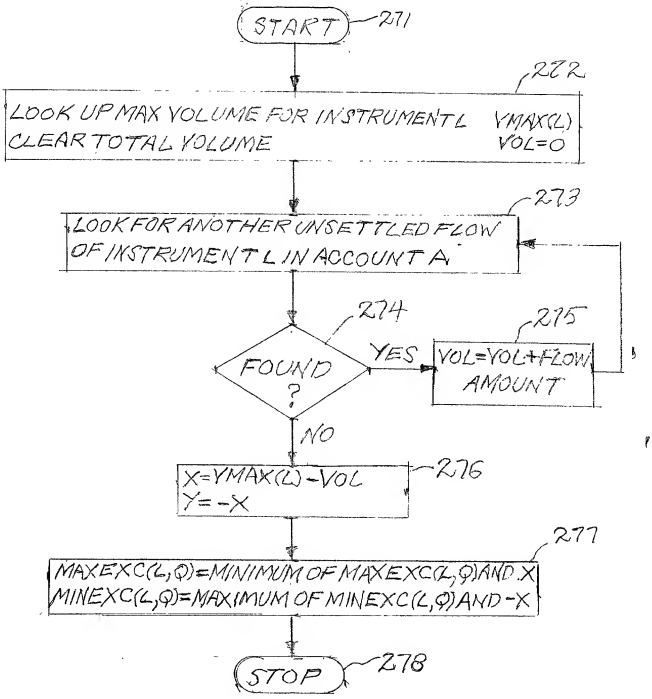

START
231
232
LOOK UP MAX POSITION FOR INSTRUMENT L
LOOK UP MIN POSITION FOR INSTRUMENT L
CLEAR NET POSITION
PMAX(L)
PMIN(L)
POS=0
233
LOOK FOR ANOTHER UNSETTLED FLOW OF INSTRUMENT L IN ACCOUNT A
234
FOUND ?
NO
YES
235
IS FLOW TO ACCOUNT A'S BORROWER ?
YES
236
POS=POS+FLOW AMOUNT
NO
POS=POS-FLOW AMOUNT
237
X=PMAX(L)-POS
Y=PMIN(L)-POS
238
239
MAXEXC(L,Q)=MINIMUM OF MAXEXC(L,Q) AND X
MINEXC(L,Q)=MAXIMUM OF MINEXC(L,Q) AND Y
STOP
245

FIG. 28



10201 * 6055007

FIG. 29



TOKYO-6028

FIG. 30

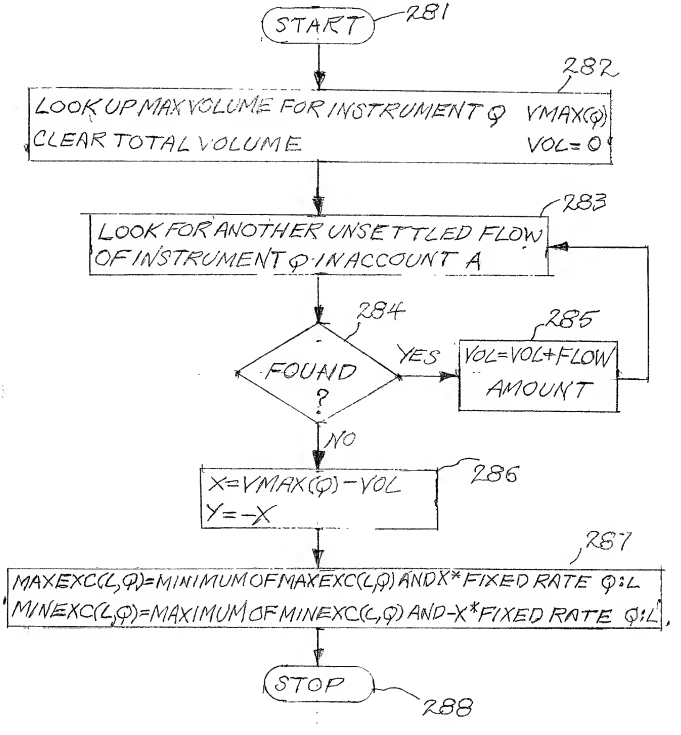

START
281
282
LOOK UP MAX VOLUME FOR INSTRUMENT Q VMAX(Q)
CLEAR TOTAL VOLUME VOL = 0
283
LOOK FOR ANOTHER UNSETTLED FLOW OF INSTRUMENT Q IN ACCOUNT A
284
FOUND ?
YES
285
VOL = VOL + FLOW AMOUNT
NO
X = VMAX(Q) - VOL
Y = -X
286
287
MAXEXC(L,Q) = MINIMUM OF MAXEXC(L,Q) AND X * FIXED RATE Q:L
MINEXC(L,Q) = MAXIMUM OF MINEXC(L,Q) AND -X * FIXED RATE Q:L
STOP
288

FIG. 31

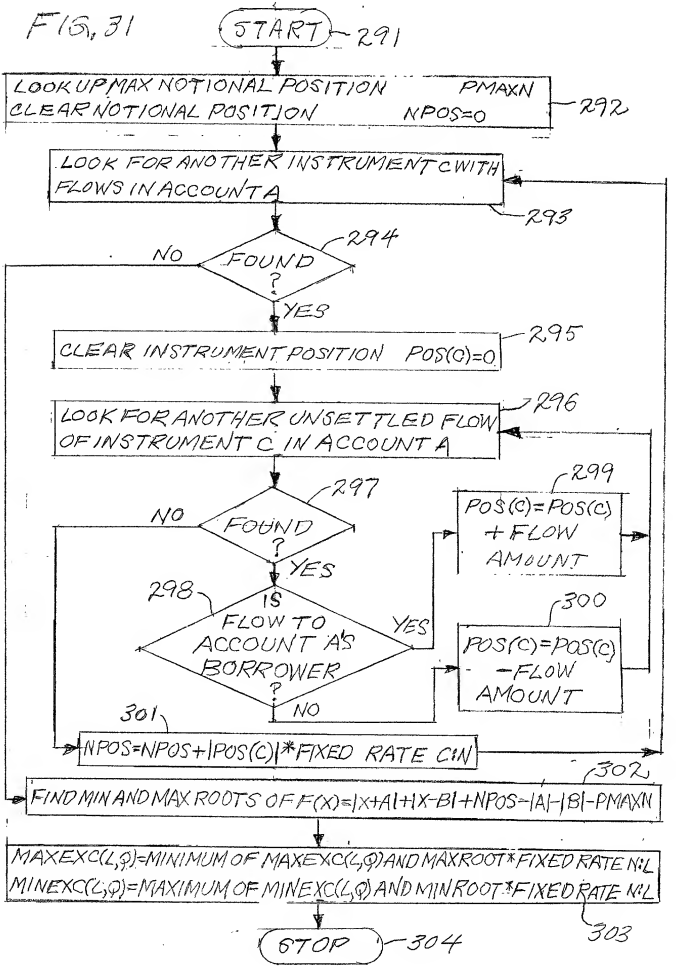

START
291
LOOK UP MAX NOTIONAL POSITION PMAXN
CLEAR NOTIONAL POSITION NPOS=0
292
LOOK FOR ANOTHER INSTRUMENT C WITH FLOWS IN ACCOUNT A
293
FOUND ?
294
NO
YES
CLEAR INSTRUMENT POSITION POS(C)=0
295
LOOK FOR ANOTHER UNSETTLED FLOW OF INSTRUMENT C IN ACCOUNT A
296
FOUND ?
297
NO
YES
POS(C)=POS(C) + FLOW AMOUNT
299
IS FLOW TO ACCOUNT AS BORROWER ?
298
YES
NO
POS(C)=POS(C) - FLOW AMOUNT
300
NPOS=NPOS+|POS(C)|*FIXED RATE C/N
301
FIND MIN AND MAX ROOTS OF F(X)=|X+A|+|X-B|+NPOS-|A|-|B|-PMAXN
302
MAXEXC(L,φ)=MINIMUM OF MAXEXC(L,φ) AND MAXROOT*FIXED RATE N/L
MINEXC(L,φ)=MAXIMUM OF MINEXC(L,φ) AND MINROOT*FIXED RATE N/L
303
STOP
304

FIG. 32

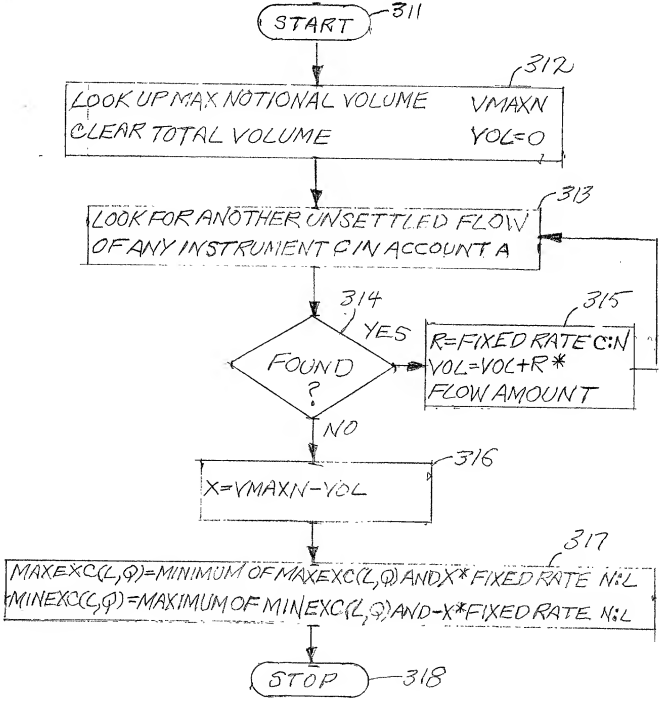

START
311
LOOK UP MAX NOTIONAL VOLUME VMAXN
CLEAR TOTAL VOLUME VOL=0
312
LOOK FOR ANOTHER UNSETTLED FLOW OF ANY INSTRUMENT C IN ACCOUNT A
313
FOUND ?
314
YES
R=FIXED RATE C:N
VOL=VOL+R* FLOW AMOUNT
315
NO
X=VMAXN-VOL
316
MAXEXC(L,Q)=MINIMUM OF MAXEXC(L,Q) AND X* FIXED RATE N:L
MINEXC(L,Q)=MAXIMUM OF MINEXC(L,Q) AND -X* FIXED RATE N:L
317
STOP
318

FIG. 33

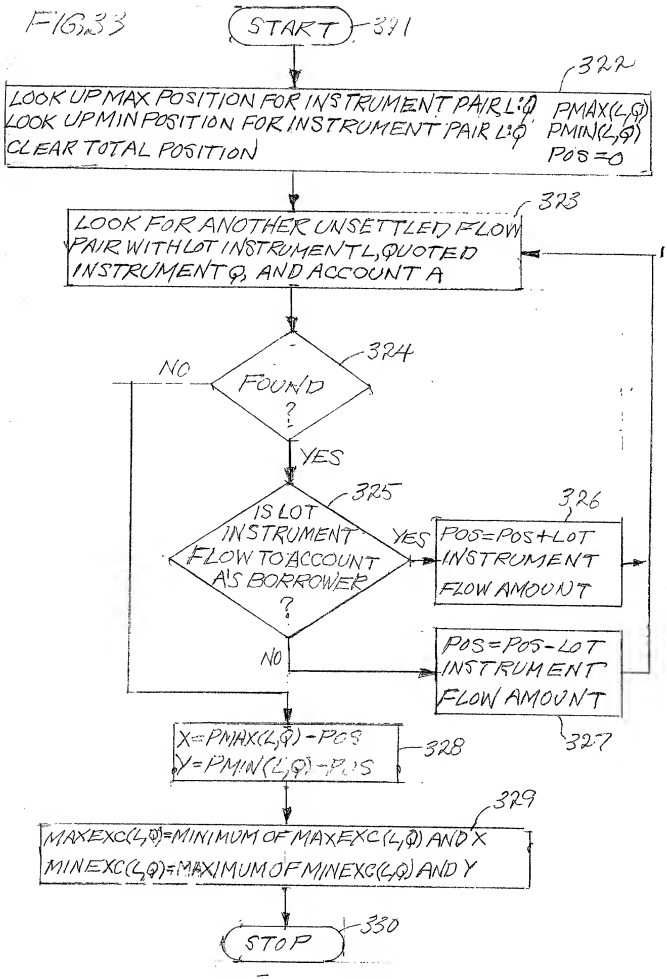

START
321
322
LOOK UP MAX POSITION FOR INSTRUMENT PAIR L,Q
LOOK UP MIN POSITION FOR INSTRUMENT PAIR L,Q
CLEAR TOTAL POSITION
PMAX(L,Q)
PMIN(L,Q)
POS=0
323
LOOK FOR ANOTHER UNSETTLED FLOW PAIR WITH LOT INSTRUMENT L, QUOTED INSTRUMENT Q, AND ACCOUNT A
324
FOUND ?
NO
YES
325
IS LOT INSTRUMENT FLOW TO ACCOUNT A'S BORROWER ?
YES
326
POS=POS+LOT INSTRUMENT FLOW AMOUNT
NO
327
POS=POS-LOT INSTRUMENT FLOW AMOUNT
328
X=PMAX(L,Q)-POS
Y=PMIN(L,Q)-POS
329
MAXEXC(L,Q)=MINIMUM OF MAXEXC(L,Q) AND X
MINEXC(L,Q)=MAXIMUM OF MINEXC(L,Q) AND Y
STOP
330

FIG. 34

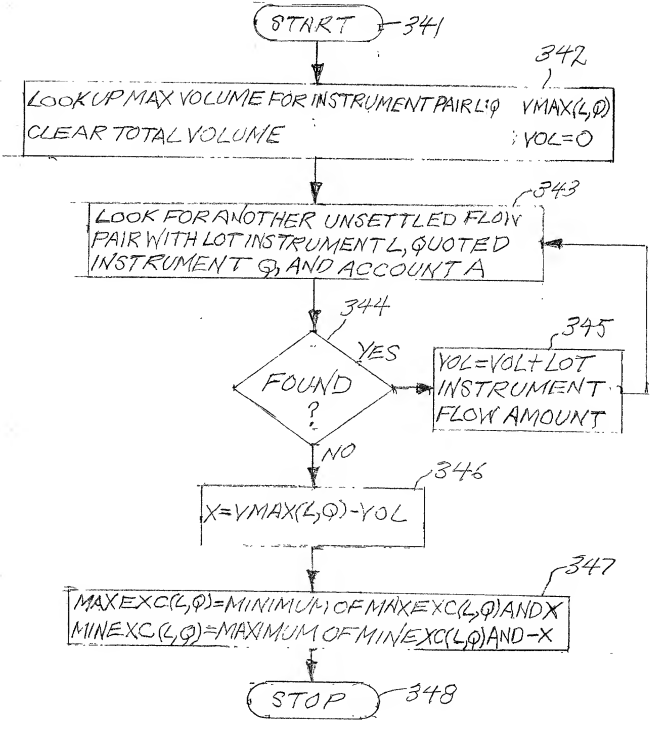


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FIG. 35

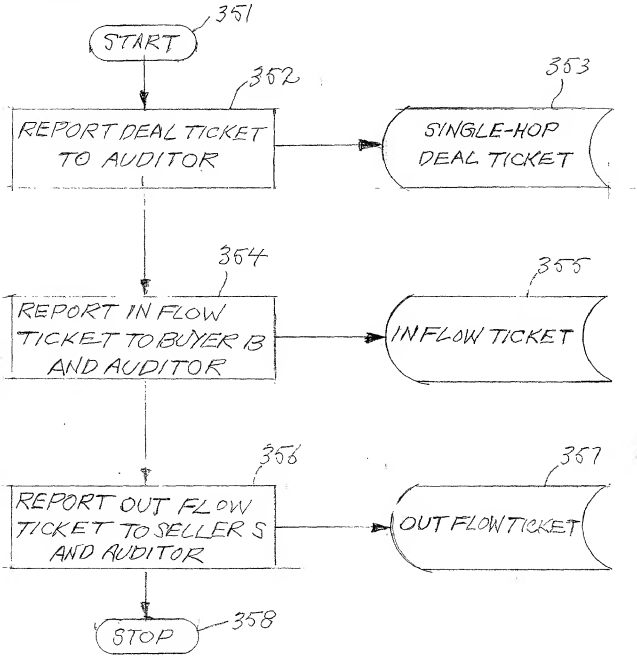

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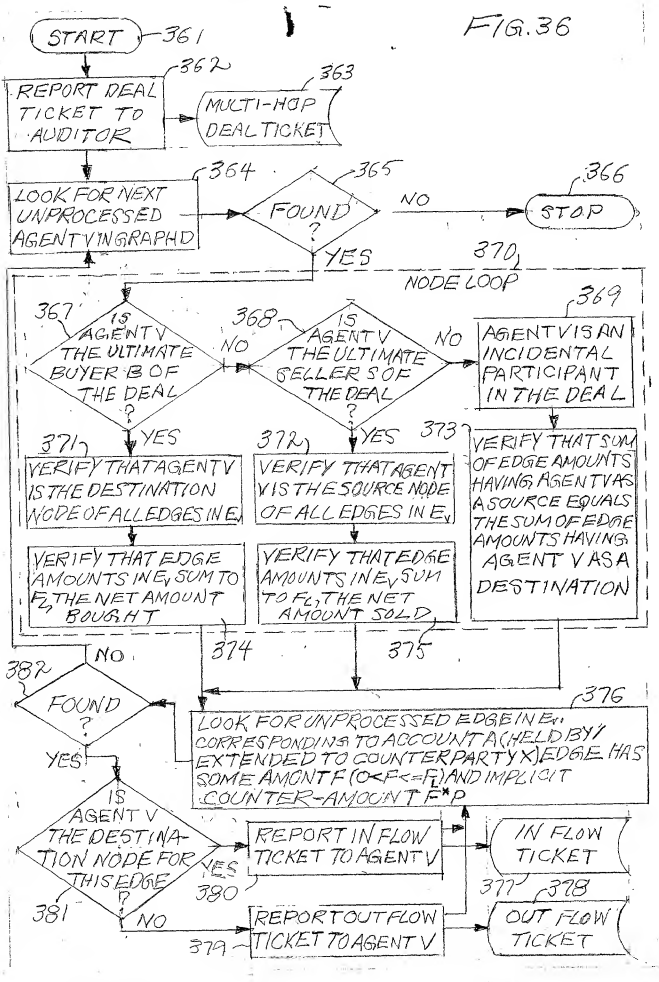
FIG. 36



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